

# Community News

## 'Solar 500' in Seabrook

# Sun-powered model car race allows JSC engineers to shine

For the second year in a row, fifth-grade students at Ed White Elementary School capped off a week of work designing and building solar-powered model cars with a race of their vehicles in the school parking lot.

The race, which is 500 inches long, was dubbed the "Solar 500" by Cindy Cross of Engineering's Crew and Thermal Systems Division. Cross is from Indiana, the home of the Indianapolis 500.

"This year it was great. We had beautiful sun and the cars ran very well," said Cross, who complained about missing the real Indy 500 because of this year's rain delays. "We ran two at a time on fishing lines to guide them because they have no steering."

Twenty-four cars competed in the May 13 race, with eight teams from each of three different classes participating. Each class raced each other, then the three winners vied head-to-head for the overall championship, she said.

"You hear them all cheering for one another and when you have a real close race it gets to be pretty exciting," Cross added, confiding that "I think the engineers have more fun than the kids do because we're not graded on anything."

Volunteering with Cross were JSC engineers Scott Askew, of Engineering's Automation, Robotics and Simulation Division; John Cornwell, Mike Ewert, Mike Rouen and Larissa Smit, all of Engineering's Crew and Thermal Systems Division; and Hamilton Standard engineer Dave Oswald.

The innovative educational pro-

ject, called "Solar Power-Up," was cosponsored by the Texas Solar Energy Society and the JSC Education Outreach team. The Solar Energy Society provided solar photovoltaic panels, motors, gears and other parts for the cars, while JSC provided volunteers who helped the students learn about teamwork, aerodynamics, friction, solar power and other engineering lessons. Parents, teachers and students all praised JSC's involvement in the project, Ewert said.

The curriculum is designed to teach the students to work in design teams, make group decisions about the engineering problems they encounter, build the model and present details of what they learned to fellow students, teachers and parents.

Cross said that as they made their presentations, the students mentioned things they had learned about aerodynamics, gear ratios, friction, weight and other scientific and engineering principles.

"They do pick up on a lot of things, and as a team they learn to work together," Cross added.

This year, several of the top teams from Ed White Elementary were able to participate in a regional competition in San Antonio, where they won the top three places.

Just as the use of solar panels has spread in recent years to such visible applications as calculators and crosswalks, organizers hope these solar races spread to other schools as a way of introducing more students to solar power technology and other engineering princi-



JSC Photos 97-06612 and 97-06613  
by Steve Candler

**JSC engineers and Ed White Elementary School students work together to power model cars with sunlight in a recent "Solar 500" race in the Seabrook school's parking lot. Above: Standing, from left, Cindy Cross Dave Oswald and Mike Ewert watch as the students get ready at the starting line. The students used fishing-line guides to steer the cars down the 500-inch track. Left: Ewert helps a student prepare her car for the race. Several of the top teams from Ed White went on to the regional competition in San Antonio, where they won the top three places.**

# Science museum offers summer camps around town

During the summer, the Houston Museum of Natural Science will offer Exploration Camps, designed to give insight into the world of science, for students ages 4-14.

Using museum collections and facilities, students have the opportunity to explore science topics in an interactive and exciting way. Touchable artifacts, creative crafts and fun activities are an integral

part of these camps.

Week-long camps which better accommodate parents' schedules are offered Monday-Friday in two-hour formats for ages four and five and in five-hour formats for ages 6-12. Summer camps begin June 2 and run through Aug. 8.

Some of the classes that are offered include:

Dynamic Dinosaurs (age four),

Digging Dinos (age five) and Reptiles Rule (ages six and seven) allows children to build models, examine fossils and create art projects.

Magic and Movie Making for children ages eight and nine focuses on learning how moving pictures work. Participants will make a movie of their own to take home.

At the museum's Challenger

Learning Center and the George Observatory in Brazos Bend State Park, kids become part of the crew of a simulated spacecraft. An overnight mission is offered at the George Observatory on July 18-19. After training, the crew will enter the spacecraft for an 11 p.m. liftoff. Crew members will spend the night in the spacecraft and complete the mission after an early morning wake up call.

From Planet Painting to an Astrosafari, summer classes held in the natural setting of Brazos Bend State Park, provide an enriching experience for young people.

For camp availability and registration information, visit the museum home page at: <http://www.hmns.mus.tx.us/hmns/home.html> or call the education department at 639-4652.

## Employees may exhibit works

Employees are encouraged to exhibit their talents during JSC's annual American Heritage Week.

American Heritage Week, planned for the week of July 7, will highlight and celebrate the diversity of the workforce at JSC.

"This is an opportunity for us all to learn more about each other and the wealth of diversity represented at JSC," said Jessie Hendrick, exhibit coordinator. "Employees interested in displaying their skills can do so during this week-long celebration."

Hendrick said the exhibits/displays may include art work (painting, sculpting, modeling); needlework

(quilting, embroidering, needlepoint, dress making); collections (antiques, collectibles, items of interest); and hobbies (crafting, woodworking).

Both civil service and contractor employees are welcome to participate. Entertainment and exhibits will be presented during the week at the Bldg. 3 cafeteria during lunch with the grand finale being held at 3 p.m. Monday, July 14, at the Gilruth Center. As in past years, the grand finale will be an evening of cultural entertainment, exhibits and food at no charge to attendees. Interested exhibitors should contact Hendrick at x31203.

## Gilruth basketball season ends

Men's basketball recently ended its spring season with four teams making the playoffs from a field of nine teams.

The Grey Panthers, Team Bud, Cardinals and Bulls all made the playoffs. In the first round the Grey Panthers were matched against the Bulls and Team Bud against the Cardinals. The Bulls defeated the Grey Panthers, 57 to 45 which advanced them into the champi-

onship game. In the second game, Team Bud defeated the Cardinals 49 to 41, advancing them to the championship game.

In the championship game, Team Bud defeated the Bulls 48 to 46. Mangers for the teams are Team Bud, Philip Reid; Bulls, Dennis O'Conner; Grey Panthers, Larry Ratcliff; and Cardinals, Don Molgaard.

Registration is now under way for the spring season.

# JSC Safety Alert

## Paper Shredder Risks

### What Happened

An employee was picking up paper from the floor near a paper shredder that had been placed on the floor in a highly trafficked pathway. The corner of her suit jacket accidentally entered the insert slot of the shredder, the shredder automatically started, and a portion of her jacket was pulled into the machine and shredded.

### Outcome of the Investigation

The shredder was identified as a Security Engineered Machinery Model 233. In this model, paper must be inserted vertically into a narrow, 10-inch wide slot. At the slot, there is a photocell that automatically turns the unit on, and the shredding action pulls the inserted material into the shredder.

The unit involved is 22 1/2 inches high, and due to its low height, one must bend forward to insert paper. In doing so, personal material can accidentally enter the slot vertically, contact the photocell, and activate the shredder. This material can include your badge, necktie, jacket bottom, scarf and hair.

All of the SEM 233 vertical feed shredders at JSC are now unplugged and tagged with a "DO NOT OPERATE" tag until an appropriate shield can be provided and installed on the units. The shield will eliminate accidental entry into the vertical feed shredder slot.

### What You can Do

When operating a paper shredder where there is the risk of an accidental entry of body parts or clothing:

- Be cautious of loose clothing, badges, bracelets, ties and hair.
- Observe all warning labels on the machine.
- Do not locate the machine in a highly trafficked path or area, if possible.
- Raise the machine to eliminate bending over it, if possible.
- Employees with a vertical feed shredder should call the Occupational Safety Office at x31347 for an evaluation.